

Initial Packet Settings To Traverse TWO NODES To Reach WINLINK Packet GATEWAY

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The following information was found to work from Trenton, Florida, connecting to DARK (W4DAK-7) and thence to NEWB (NF4RC-7) and thence to GNVWLK (KX4Z-10). The passage of winlink email was slow (200-270 bytes/minute) but seemed robust --- dealing properly with interruptions from NODE BROADCASTS, ID's and interference from transmitters far down the connection pathway.

Digipeating attempts over the same pathway were frustrating and after a few tries were discarded.

The Connection Script used to make the connection might be improved, but was simply:

```
C DARK
C
C 7 NEWB
C
C 7 GNVWLK
C
```

and although it seemed to finish prematurely, the connection did go to completion with connection to GNVWLK and eventual CMS access. It is possible that better choices of what verbiage to look for to confirm a connection, or commands designed to prevent "jumping" to a more direct connection, might perform better. For further information on Connect Scripts, the reader is referred to:

https://www.qsl.net/w4eat/w4eat/Making_a_packet_connection_to_a_.htm

For further informaation on linbpq commands, review:

<http://www.cantab.net/users/john.wiseman/Documents/Commands.htm>

<http://www.cantab.net/users/john.wiseman/Documents/NodeCommands.htm>

One method to FORCE exact connections is to place an exclamation point before the callsigns, such as

```
C DARK
C
C 7 !NEWB
C
C 7 !GNVWLK
C
```

The choices for PACKET (AX.25) settings were chosen to try and keep the communications channel clear. The problem with half-duplex node stations is that any transmission that they can hear on the channel can corrupt a packet they are trying to receive, so the goal is to keep only one station transmitting at a time. In order to do this, FRACK (how long to wait before retransmitting an unacknowledged packet) was kept HIGH and the MAX FRAMES low (1) and the number of retries HIGH (10). [Reference: <ftp://ftp.wayne.edu/ldp/en/AX25-HOWTO/AX25-HOWTO.pdf>]

WINLINK Packet Setup Settings:
(KISS Packet TNC type, using Soundmodem Ver 0.97b)

1200 baud settings for a slow transceiver	Value
Tx Delay (milliseconds)	600
Maximum Packet Length	128
Maximu Frames	1
Frack	5
Persistence	160
Slot time	30
Maximum Retries	10